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IS 8354 (1977): Code of practice for packaging of electric fans [TED 24: Transport Packages]



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“Knowledge is such a treasure which cannot be stolen”

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IS : 8354 - 1977

Indian Standard

CODE OF PRACTICE FOR
PACKAGING OF ELECTRIC FANS

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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

June 1977



AMENDMENT NO. 1 APRIL 1986

TO

IS:8354-1977 CODE OF PRACTICE FOR
PACKAGING OF ELECTRIC FANS

[*Page 4, clause 5.2(b)*] - Substitute the following
for the existing matter:

'b) *Drop Test* - To be tested for drop resistance on two adjacent sides as well as on one edge and two diagonally opposite corners from a height of one metre in accordance with the procedure given in IS:7028(Part 4)-1973^{II}.'

(MCPD 19)

Reprography Unit, ISI, New Delhi, India

Indian Standard

CODE OF PRACTICE FOR PACKAGING OF ELECTRIC FANS

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Indian Standard

CODE OF PRACTICE FOR PACKAGING OF ELECTRIC FANS

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 31 January 1977, after the draft finalized by the Packaging of Engineering Goods Sectional Committee had been approved by the Marine, Cargo Movement and Packaging Division Council.

0.2 It has been observed that fans are usually damaged in transit, when not properly packed. Therefore it has been felt that a code of practice be prepared for packing of electric fans and its accessories.

0.3 This standard is applicable to surface transport only both inland and overseas.

0.4 The related standards on electric fans and its accessories are given for information in Appendix A.

1. SCOPE

1.1 This standard lays down the recommended practice for packaging of electric fans and accessories, if any.

2. TERMINOLOGY

2.1 For the purpose of this standard the definitions given in IS:707-1968*, IS:4261-1967† and IS:6703-1972‡ shall apply.

3. METHOD OF PACKING

3.1 General

3.1.1 The mode of packaging of motor and accessories of fan shall be as agreed to between the purchaser and the manufacturer.

3.1.2 Electric fans shall be packed in either of the following:

- a) Corrugated fibreboard boxes,
- b) Wooden cases,
- c) Battened plywood cases, and
- d) Any other suitable material of suitable design and construction.

*Glossary of terms applicable to timber and timber products (*first revision*).

†Glossary of terms relating to paper and pulp based packaging materials.

‡Glossary of wooden packaging terms.

3.1.2.1 The packing materials, for export cargoes shall be checked for conformity to the regulations imposed by importing countries.

3.2 Condition of Packing

3.2.1 Unit packing of the fan motor and the accessories shall be such as to prevent dust, moisture, etc, entering inside by use of suitable packing materials, such as polyurethane foam, polyethylene, wax paper, expanded polystyrene, etc.

3.2.2 The motor and the accessories shall be held firmly inside the packing box to avoid shifting during transportation.

3.2.3 In case the fans are packed in corrugated fibreboard boxes the flaps shall be closed by gummed paper tape or any other suitable material. Alternatively, the flaps may be stapled.

3.2.4 The boxes/cases shall be strapped properly.

4. MATERIALS

4.1 Corrugated Fibreboard Boxes — The corrugated fibreboard boxes shall conform to IS:2771-1965* in case the net mass of the box does not exceed 50 kg. For heavy packages the fibreboard box shall be suitably designed.

4.2 Wooden Cases — The wooden box shall conform to IS:1503-1967†.

4.3 Battened Plywood Cases — The battened plywood case shall conform to IS:2674-1964‡.

5. SAMPLING AND TESTING

5.1 Sampling — Representative samples of the packed boxes shall be drawn from the lot for testing. The sampling plan shall be as agreed to between the purchaser and the supplier.

5.2 Testing — The packed box shall be subjected to the following type tests as per the requirements prescribed:

a) *Rolling Test* — as given in IS:7028 (Part V)-1973§.

b) *Drop Test* — to be tested for drop resistance on all six sides as well as on all corners of the box from a height of 1 metre in accordance with the procedure in IS:7028 (Part IV)-1974||.

*Specification for corrugated fibreboard boxes.

†Specification for wooden packing cases (*first revision*).

‡Specification for plywood cases — battened construction.

§Performance tests for complete filled transport packages: Part V Rolling test.

||Performance tests for complete filled transport packages: Part IV Vertical impact drop test.

- c) *Stack Load Test* — as given in IS:7028 (Part I)-1973*. The number of similar boxes/cases above the case under test shall be such as (keeping in view the maximum heights admissible in transportation by various modes) to obtain a total height of:
- 1) 2 metres for corrugated boxes, and
 - 2) 4 metres for wooden packing cases.
- d) *For Marine Cargo, Water Spray Test* — as given in IS:7028 (Part VIII)-1974† or salt spray test as given in 5.2 of IS:2074-1962‡ as agreed to between the supplier and the purchaser.

5.2.1 The tests shall be carried out on separate samples, unless otherwise agreed to between the supplier and the purchaser.

5.3 Criteria of Conformity — The tested package shall be opened to examine the contents of the package and the box shall be deemed to have passed the requirement if:

- a) there is no physical deformation which, in turn, might cause deterioration to the declared performance of the fan;
- b) there is no physical damage to the finish either on the fan or on the components; and
- c) electrical connections are intact.

6. MARKING

6.1 Unless otherwise specified by the purchaser, the following information shall be legibly stencilled or printed on the outside of the box:

- a) Name and trade-mark of the supplier;
- b) Particulars of the fans indicating the type of fan, sweep, colour, etc;
- c) Number of fans/accessories in the box; and
- d) Handling instructions, if any (like do not drop, this side up, etc) as given in IS: 1260 (Part II)-1973§.

*Performance tests for complete filled transport packages: Part I Stack load test.

†Performance tests for complete filled transport packages: Part VIII Water spray.

‡Specification for ready mixed paint, red oxide-zinc chrome, priming.

§Pictorial markings for handling and labelling of goods: Part II General goods (*first revision*).

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A P P E N D I X A

(*Clause 0.4*)

INDIAN STANDARDS ON ELECTRIC FANS AND ITS ACCESSORIES

IS:

- 374-1966 Electric ceiling type fans and regulators (*second revision*)**
- 555-1967 Electric table type fans and regulators (*second revision*)**
- 1169-1967 Electric pedestal type fans and regulators (*first revision*)**
- 1709-1960 Fixed capacitors for fans**
- 2312-1967 Propeller type ac ventilating fans (*first revision*)**
- 2997-1964 Air circulator type electric fans and regulators**
- 3588-1966 Electric axial flow fans**
- 6680-1972 Railway carriage fans**

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INDIAN STANDARDS INSTITUTION

Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 110002

Telephone : 27 01 31 (20 lines)

Telegrams : Manaksanstha

Regional Offices:

Western : Novelty Chambers, Grant Road
 Eastern : 5 Chowringhee Approach
 Southern : C.I.T. Campus, Adyar

	Telephone
BOMBAY 400007	37 97 29
CALCUTTA 700072	23-08 02
MADRAS 600020	41 24 42

Branch Offices:

'Pushpak', Nurmohamed Shaikh Marg, Khanpur
 'F' Block, Unity Bldg, Narasimharaja Square
 Ahimsa Bldg, SCO 82-83, Sector 17C
 5-8-56/57 L. N. Gupta Marg
 117/418 B Sarvodaya Nagar
 B.C.I. Bldg (3rd Floor), Gandhi Maldan East
 Hantex Bldg (2nd Floor), Rly Station Road

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